# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,745	01/05/2004	Nobuhide Morie	9333/366	. 5625
757 7590 01/25/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395			EXAMINER	
			NGUYEN, CUONG H	
CHICAGO, IL 60610			ART UNIT	PAPER NUMBER
			3661	
	•		•	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/25/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
		10/751,745	MORIE, NOBUHIDE			
	Office Action Summary	Examiner	Art Unit			
		CUONG H. NGUYEN	3661			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address			
WHIC - Exter after - If NO - Failu - Any I	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period vere to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).			
Status			·			
2a)	Since this application is in condition for allowar	action is non-final. nce except for formal matters, p				
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-16</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray.  Claim(s) is/are allowed.  Claim(s) <u>1-3 and 12-16</u> is/are rejected.  Claim(s) <u>4-11</u> is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Example.	epted or b) objected to by the drawing(s) be held in abeyance. So ion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority documents  application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applic rity documents have been rece u (PCT Rule 17.2(a)).	ation No ived in this National Stage			
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 1/05/04.	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:	Date			

Art Unit 3661

#### Status of the claims

1. Claims 1-16 are currently pending.

#### **Priority**

2. This application has a JP priority dated 1/06/2003.

### **Drawing Objections**

3. This application has been filed with 4 sheets of formal drawings, and they are accepted for examinations.

According to pending claims, there should be 2 different windows in one representation (i.e., a driver would see both FIG.2A & FIG. 2B in one display); however, this claimed detail is not shown (as in one single display); corrections are required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida et al. (US Pat. 6,067,502).

A. Re. To Claims 1, and 12-13: Hayashida et al. disclose a navigation system comprising: a monitor screen operable to display images (see Hayashida et al., the abstract); a mapimage drawing unit operable to generate map image data for presentation of a map image

Art Unit 3661

in a window on the monitor screen (see Hayashida et al., FIG. 48); a simple-map drawing unit operable to generate simple-map image data for presentation of a simple map image of a main road extending outside of the window (see Hayashida et al., FIG.23); and an image combining unit operable to display the map image inside the window and the simple image of the main road outside of the window on the monitor screen (see Hayashida et al., FIG.24); wherein the map image in the window is presented in greater detail than the simple map image located outside of the window (see Hayashida et al., FIGS.23-24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Hayashida et al. for explicitly disclosing two windows next to each other in one display that shows extended route from another picture of that display for an advantage of visualizing both details and surrounding travel areas in one viewing because a driver always wants to know where he is, and what would be next.

B. Re. To claim 2: Hayashida et al. obviously retrieve a name corresponding to the main road in a stored database see Hayashida et al., FIG.2 ref. F9) then displaying on the simple map image for a driver's recognition (see simplified displayed pictures of Hayashida et al., FIGS.23-24).

C. Re. To Claim 3: Hayashida et al. are Japanese inventors; therefore, they have been recognized Japanese's classification/ranking of road/street; including that a main road has a rank higher than or equal to the rank of currently traveled roads (the examiner assumes "collector road" on line 2 of claim 3 is a traveling road – besides, AAPA is already admitted in para. [0024] that: "Herein, main roads refer to roads above a given rank in road categories. For example, in Japan, roads are classified into the following ranks:

Art Unit 3661

from the highest rank, (1) national expressways, (2) city expressways, (3) national roads, (4) main local roads, (5) main local roads (designated city roads), (6) prefectural roads, (7) main ordinary roads, (8) ordinary roads, (9) narrow roads, (10) ferry routes, (11) car train tracks, and (12) others. In this embodiment, for example, roads of the ranks (1) to (4) are defined as main roads.').

Hayashida et al. do not explicitly disclose a display combining pictures of inside and extended route from another picture of that display.

However, travel routes represented in FIGS. 23-24 already disclose the teaching intention of claim 1: showing peripheral areas of a travel route and a small window showing details of that travel route.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Hayashida et al. for explicitly disclosing a display combining pictures of inside and extended route from another picture of that display for an advantage of visualizing both details and surrounding travel areas in one viewing because a driver always wants to know where he is, and what would be next.

D. Note: (AAPA admitted in the background, para. [0009] that "the main roads are not displayed. In a wide-area map displayed on the large scale and the map based on the main highways, as in the above publication Japanese Unexamined Patent Application Publication No. 2002-71362, the shapes of most roads including peripheral main roads can be recognized, but detailed information about an area surrounding the vehicle can hardly be recognized, although the user wants such information most of all.");

- generating simplified map data for display outside of a predetermined portion of said monitor screen (this is already admitted in the background, para.[0010] "

Art Unit 3661

Some navigation systems enable two-window display in which different maps are displayed on two split windows of a monitor screen. By displaying a detailed map and a wide-area map in the respective windows, both detailed information about the surroundings of the vehicle and information about the shapes of roads in the wide area including peripheral main roads can be simultaneously displayed.") and para.[0011]-[0012] "In such a two-window display, however, information, such as roads, characters, landmarks, and polygons, is displayed on both the detailed map and the wide-area map." This is only an intent of use, further this is not what claimed: "For this reason, much unnecessary information is displayed on the monitor display screen, which is not so large, and this hinders the user from grasping essential information.

Furthermore, because each window has half the size of the monitor screen, the monitor screen must be large. Moreover, when the monitor screen is vertically or horizontally split into two, the aspect ratio is changed, and the maps displayed in the windows are hard to see. In addition, the user must compare the detailed map and the wide-area map while changing the viewpoint in order to check the correspondence there between. This is quite troublesome".

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida et al. (US Pat. 6,067,502), in view of Applicants Admission of Prior Art (AAPA).

The rationales and reference for rejection of claim 1 are incorporated.

A. As to claim 14: Hayashida et al. suggest a method for displaying map image information, said method comprising:

Art Unit 3661

- providing a vehicle; providing a navigation system inside said vehicle, said navigation system including a monitor screen operable to display map images (see Hayashida et al., the abstract).

Hayashida et al. also suggest about identifying intersections with a main road within a predetermined distance of the vehicle (this can be interpreted as a vicinity area/displayed intersection - (see Hayashida et al., FIG. 3 "CROSSING POINT CSP" and "TRAVEL DISTANCE DATA ML").

Besides AAPA's paragraphs [0009-0012]( (admitted in the background, para.[0009] "the main roads are not displayed. In a wide-area map displayed on the large scale and the map based on the main highways, as in the above publication Japanese Unexamined Patent Application Publication No. 2002-71362, the shapes of most roads including peripheral main roads can be recognized, but detailed information about an area surrounding the vehicle can hardly be recognized, although the user wants such information most of all.");

- generating simplified map data for display outside of a predetermined portion of said monitor screen (admitted in the background, para.[0010] "Some navigation systems enable two-window display in which different maps are displayed on two split windows of a monitor screen. By displaying a detailed map and a wide-area map in the respective windows, both detailed information about the surroundings of the vehicle and information about the shapes of roads in the wide area including peripheral main roads can be simultaneously displayed.") and para.[0011]-[0012] "In such a two-window display, however, information, such as roads, characters, landmarks, and polygons, is displayed on both the detailed map and the wide-area map." This is only an intend of

Art Unit 3661

use, further this is not claimed: "For this reason, much unnecessary information is displayed on the monitor display screen, which is not so large, and this hinders the user from grasping essential information.

Furthermore, because each window has half the size of the monitor screen, the monitor screen must be large. Moreover, when the monitor screen is vertically or horizontally split into two, the aspect ratio is changed, and the maps displayed in the windows are hard to see. In addition, the user must compare the detailed map and the wide-area map while changing the viewpoint in order to check the correspondence there between. This is quite troublesome."), Hayashida et al. suggest about determining shape of road based on the intersections and on road links linking the intersections (see Hayashida et al., "Here the searching processing of the guide route is simply explained. Information about the road is stored, for example, as 1 unit for a road, which links between of two forks (intersection etc.), at information memory unit 37 (FIG. 4). The information at each road includes length data in the road, shape data which indicates the direction etc. of the road and road attribute data which indicates the classification etc. of the road. Therefore a searching cost to convert to a length of the road to these data values is set. For example, the wider the width of the road is, the smaller the value with searching cost becomes. Concretely if a number of lanes of the road is 3, the searching cost of "10" is given and oppositely if the number of the lanes is 1 the searching cost of "30" is given. Therefore the searching cost becomes small when the road width is wide, the searching cost becomes big when the road width is narrow", and "The display processing of the above direction mark 264 of the destination is simply explained below. The intersection point of the previous guide route displayed in the 2nd

Art Unit 3661

screen and the edge of the map screen which is displayed in the 2nd screen 108 of display 33 is computed. In this processing, The road data which is included in the coordinate range which is displayed in display 33 is read from each road which composes the above guide route data MW by image processor 9. Then the road which is the nearest entry destination TP is found from the road data. By that the road number data which links to the entry destination from the guidance beginning point is arranged in the order, the guide route data MW is composed. Therefore the road number which has this most big order (address number) indicates the road which is the nearest the entry destination").

As previous rationale, Hayashida et al. also suggest about generating simplified map data for display outside of a predetermined portion of said monitor screen. B. As to claim 15: Hayashida et al do not explicitly disclose that predetermined distance is three miles. However, Hayashida et al. show a vicinity area that would include a claimed distance about a certain length: e.., 3 miles (see Hayashida et al., "After this, if the car moves in a specific distance (step SD16), "scroll processing of screen" of a subroutine is executed (step SD18). In this scroll processing of screen, a displayed map is scrolled and the present position of the car is shown in the center of the 3rd screen. After the screen is scrolled (step SD18) or the car doesn't move in the specific distance (step SD16), a geographical coordinate in a edge of the screen of the guide route which was displayed in the 3rd screen is detected (step SD20)" and "FIG. 32 shows the other example of FIG. 24 and FIG. 25 of the 4th embodiment and FIG. 30 of the 5th embodiment. In this example, a distance and time information 186 are shown with the guide route. This distance and time information indicate a distance and required time to the end point of guide route. For example this distance and time information are the

distance according to the route and the required time to travel this distance by the prescribed speed, when traveling guide route 182 to the end point of guide route in FIG. 32.").

C. As to claim 16: AAPA paragraph [0010] teaches a step of detecting whether a nearest main road has entered the predetermined portion of the monitor screen by viewing a current display.

### Conclusion

- 6. Claims 1-3, 12-16 are not patentable. Claims 4-11 are objected.
- 7. The prior art made of record, which are listed in PTO-892, and not relied upon are considered pertinent to applicant's disclosure.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759. The examiner can normally be reached on 9:30 am 5:30 pm.

  If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 3661

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

CUONG H. NGUVEN Primary Examiner

Art Unit 3661